

Date: Fri, 3 Jun 94 04:30:22 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #168
To: Ham-Ant

Ham-Ant Digest Fri, 3 Jun 94 Volume 94 : Issue 168

Today's Topics:

 about tuning 3el. YAGI
 Antenna 4 Sale
 Balun question (3 msgs)
 Dipole help (3 msgs)
Grid Dip Oscillator or Noise Bridge?
 Ham-Ant Digest V94 #166
 Ham-Ant Digest V94 #167
 modeling of a jpole
Noise bridge - use your attenuator
Opinion on Alpha-Delta SWL sloper
 stationmaster radomes wear out!
Taking apart and putting together antennas
Want to hear your experience with AEA Isoloop.

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 2 Jun 1994 21:06:08 -0000
From: news.delphi.com!news.delphi.com!not-for-mail@uunet.uu.net
Subject: about tuning 3el. YAGI
To: ham-ant@ucsd.edu

I use a YAGI 3 elements for 28 MHz (LEM 3D)
in vertical position.
Has SWR =1 from 27.550 to 27.750
I use it to long (est) distances
Should I but it in horizontal position?

Some more info about these antennas please too.

makis savaidis
(intersof@cperi.forth.gr)

TH935 THESSALONIKI - MAKEDONIA - HELLAS

Date: Thu, 2 Jun 1994 22:53:08 GMT
From: unify!Unify.com!gfaus@uunet.uu.net
Subject: Antenna 4 Sale
To: ham-ant@ucsd.edu

I'm posting this for a friend, please don't respond to me directly!

For Sale:

Cushcraft R-5 vertical in excellent condition.
5 bands, 10 thru 20 meters.
Pickup in Sacramento, CA area only.
\$150.00
Please contact Tim, KM6AS @ (916) 983-1191.

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+=====+
| "When you reach a fork in the road, take it!" |
| Yogi Berra |
| |
| \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ | Glenn Faus KD6VNR |
| \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ | Systems Administrator |
| \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ | Unify Corp. |
| \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ | gfaus@sac.unify.com |
| \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ | Voice: (916) 928-6271 |
+=====+
```

Date: Thu, 02 Jun 94 10:29:12 EDT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!usenet.ins.cwru.edu!
ns.mcs.kent.edu!kira.cc.uakron.edu!malgudi.oar.net!hypnos!voxbox!
jgrubs@network.ucsd.edu
Subject: Balun question

To: ham-ant@ucsd.edu

-----BEGIN PGP SIGNED MESSAGE-----

smithson@ACM.ORG writes:

> Greetings!

>

> I have an 80m dipole with a Van Gordon 1:1 balun at the feed point, with
> 60' of RG58/U coax running to my shack. For giggles one night I put my
> ohmmeter across the inner conductor and the shield and it read 0! I
> fished out a spare balun of the same type and measured it both between the
> poles where the legs of the dipole are connected and between the center
> and shield of the coax jack - both read 0.

An ohmmeter is a DC device. It tells you little about what's
happening with RF at 80 meters.

-----BEGIN PGP SIGNATURE-----

Version: 2.6

iQCVAwUBLe3tSDDUWq8RWEeNAQFSNQp+K/hYSEvv+/QhQ3rCw6hvucIdQM+bmT4i
AGl3zst5i4dV0j4oXUcMkMqlwJdJ+fblylyzunedlCGXcGeWctyCGdRgftT/V2Kpw
j8fiqEnR4K1xTT/n/XKfZ+0EinY0AExKqh5+nVcFqB1weNE+0rZ5ChxMbr2aYmQE
JH5+QmGtufQ=
=bWyR

-----END PGP SIGNATURE-----

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+-----+
| Jim Grubs, W8GRT          Voxbox Enterprises   THIS SPACE FOR RENT   |
| jgrubs@voxbox.norden1.com 6817 Maplewood Ave.  RATES REASONABLE    |
| Fido: 1:234/1.0          Sylvania, Ohio 43560 Home: 419/882-2697    |
|           AMATEUR RADIO - The National Park of the Mind             |
+-----+
```

Date: 2 Jun 1994 16:08:15 GMT

From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!cs.utexas.edu!convex!
news.duke.edu!eff!news.kei.com!ssd.intel.com!chnews!cmoore@network.ucsd.edu

Subject: Balun question

To: ham-ant@ucsd.edu

smithson@ACM.ORG wrote:

: educated, I see that two kinds really exist; voltage and current. Looking
: at the schematics for both, it looks to me like a voltage balun should

: appear to be shorted at DC while a current balun should not. The book
: also recommends a current balun for this type of application.
: Brian n8wrl (soon to be /ag)

Hi Brian, there's another kind of balun called a choke balun where you just slip ferrite cores over the coax. I have tried all three kinds on my non-resonant dipole and find the Amidon HBHT200 to be the best for me. It is a high power voltage balun rated at least ten times my power level. IMHO, if you obtain voltage baluns rated at ten times your power output, they will not "blow up". My high power MFJ current balun is flakey on a couple of bands and the choke approach didn't work at all for me.

Don't try using the baluns built into 300w tuners with non-resonant antennas and 100 watts. They will saturate. However, the balun built into my MFJ-989 3kw tuner worked fine and never saturated at 100w.

73, KG7BK, CecilMoore@delphi.com

Date: 2 Jun 1994 16:46:54 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!news.umbc.edu!eff!news.kei.com!ssd.intel.com!chnews!cmoore@network.ucsd.edu
Subject: Balun question
To: ham-ant@ucsd.edu

smithson@ACM.ORG wrote:

: I have an 80m dipole with a Van Gordon 1:1 balun at the feed point, with
: Brian n8wrl (soon to be /ag)

Hello again, Brian. I forgot to ask what is the power rating of your Van Gordon balun and how much power are you running?

Also, a balun that has low DC resistance bleeds static electricity off the antenna which is a very good feature in my extremely high static electricity environment here in Arizona. When I used to run a G5RV with a choke balun, I could hear arcing inside my transceiver because of static electricity on the antenna.

73, KG7BK, CecilMoore@delphi.com

Date: 2 Jun 1994 18:22:14 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!psgrain!news.tek.com!tekgrp4.cse.tek.com!royle@network.ucsd.edu

Subject: Dipole help
To: ham-ant@ucsd.edu

I wrote:

>. . . In all modern rigs I know of, the AGC can't be disabled. . .

I stand corrected! Some modern rigs DO permit disabling of the AGC.
At least the TS-930 and FT-990 have this capability. Thanks to N4ZR and
KD10N for correcting me.

Roy Lewallen, W7EL
roy.lewallen@tek.com

Date: 2 Jun 1994 19:01:11 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!vixen.cso.uiuc.edu!
usenet@network.ucsd.edu
Subject: Dipole help
To: ham-ant@ucsd.edu

In <2sl80m\$e53@tekadm1.cse.tek.com>, royle@tekgp4.cse.tek.com (Roy W Lewallen)
writes:

>I wrote:

>

>>. . . In all modern rigs I know of, the AGC can't be disabled. . .

>

>I stand corrected! Some modern rigs DO permit disabling of the AGC.

>At least the TS-930 and FT-990 have this capability. Thanks to N4ZR and

>KD10N for correcting me.

>

>Roy Lewallen, W7EL

>roy.lewallen@tek.com

>

AGC can be disabled in most if not all of high-class rigs. I have
heard that this feature is often used by top DX hunters.

Ignacy Misztal	Ham radio: N09E, SP8FWB
E-mail: ignacy@uiuc.edu	
University Of Illinois	1207 W. Gregory Dr., Urbana, IL 61801, USA
tel. (217) 244-3164	Fax: (217) 333-8286

Date: 2 Jun 1994 20:16:07 GMT
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!europa.eng.gtefsd.com!

newsxfer.itd.umich.edu!zip.eecs.umich.edu!yeshua.marcam.com!news.kei.com!
ssd.intel.com!chnews!cmoore@network.ucsd.edu
Subject: Dipole help
To: ham-ant@ucsd.edu

Ignacy Misztal (ignacy@misz.animal.uiuc.edu) wrote:

: AGC can be disabled in most if not all of high-class rigs. I have
: heard that this feature is often used by top DX hunters.
: Ignacy Misztal Ham radio: N09E, SP8FWB

Hi Ignacy, disabling the AGC is especially helpful when trying to
receive a weak signal in the presence of a strong signal when using
an audio filter on CW... Notch the strong one and peak the weak one.

73, KG7BK, CecilMoore@delphi.com

Date: 2 Jun 1994 12:26:16 GMT
From: agate!howland.reston.ans.net!news.moneng.mei.com!sol.ctr.columbia.edu!
news.kei.com!ssd.intel.com!chnews!scorpion.intel.com!jbromley@ames.arpa
Subject: Grid Dip Oscillator or Noise Bridge?
To: ham-ant@ucsd.edu

In article <2sht8j\$hp@chnews.intel.com>,
I wrote:

[Regarding Jerald's matching his antenna with a transmatch]
[and bridge, the article *should* have read:]

For the receive-only bands, build a crystal calibrator (see the
Amateur's Handbook), couple it to the antenna by means of its own
small antenna and tune for maximum S-meter reading on the calibrator
harmonic closest to the frequency of interest.

Jim, W5GYJ

Date: 2 Jun 94 12:57:52 GMT
From: news-mail-gateway@ucsd.edu
Subject: Ham-Ant Digest V94 #166
To: ham-ant@ucsd.edu

Hi Roy -- delighted to see you on the net.

Just one very minor quibble with your posting -- my TS-930 has an AGC off

switch setting (of course, maybe it's not a modern rig any more <G>).

Real reason for the note is to ask about present status of Elnec. I have a <legal> copy of 2.0 and like it a lot, but don't know/recall what the current version is or how it differs.

73, Pete
n4zr@netcom.com
N4ZR@N4OHE (PacketCluster)

2003 Sarazen Pl.
Reston, VA 22091

Date: 3 Jun 94 03:12:12 GMT
From: news-mail-gateway@ucsd.edu
Subject: Ham-Ant Digest V94 #167
To: ham-ant@ucsd.edu

I have a noise bridge, grid dip oscillator and the mfj swr analyzer.....if I could have one it would be the mfj swr machine.....I use it 9 out of 10 times when working on antennas.

*****-----

Dr. Rick Zabrodski BSc, MD, CCFP(E) * VE6GK "glider king"
EMAIL: zabrodsk@med.ucalgary.ca * "M.D. on weekdays"
Packet: VE6GK@VE6YYC.#cgy.ab.can.na * "Solar powered aviator
Phone: (403) 271-5123 Fax: 225-1276 * on weekends!"

Date: 2 Jun 94 15:26:29 GMT
From: news-mail-gateway@ucsd.edu
Subject: modeling of a jpole
To: ham-ant@ucsd.edu

Has anyone modeled a j-pole with ELNEC, Mininec,... I set it up as follows

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| |
| |-----feed point here.
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The results i get seem to indicate too high a takeoff angle (~30 degrees).
I thought it was lower (about 15-18 degrees). I was looking at a 2m design.

Any ideas?

Thanks.

end

the views expressed here are the author's

C. Harper harper@huntsville.sparta.com or kd4qio@amsat.org
KD4QIO
SPARTA Inc (205) 837-5282 x1216 voicemail
4901 Corporate Drive (205) 830-0287 FAX
Huntsville AL 35805
"we have met the enemy and he is us." w. kelly

Date: 2 Jun 1994 14:18:02 GMT
From: ihnp4.ucsd.edu!agate!msuinfo!netnews.upenn.edu!eniac.seas.upenn.edu!
depolo@network.ucsd.edu
Subject: Noise bridge - use your attenuator
To: ham-ant@ucsd.edu

I've found that when trying to tune a noise bridge for a null when using
modern solid-state rigs, flipping the attenuator in line often makes finding
the null easier, and also gives a more reliable reading. This is because
many receivers don't have true 50 ohm input impedances, but putting
the attenuator in line will make it look close to 50 ohms (assuming the
attenuator was designed well). If you're unsure of the quality of the
internal attenuator in the rig, use a high-quality external one. Usually
20 dB works well with the bridge I use.

--- Jeff

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Jeff DePolo WN3A Twisted Pair: (215) 337-7383H 387-3059W
depolo@eniac.seas.upenn.edu RF: 443.800+ MHz 442.400+ MHz 24.150 GHz

Date: Thu, 2 Jun 1994 22:27:30 GMT
From: ihnp4.ucsd.edu!usc!elroy.jpl.nasa.gov!lll-winken.llnl.gov!fnnews.fnal.gov!
gw1!nntpa!not-for-mail@network.ucsd.edu
Subject: Opinion on Alpha-Delta SWL sloper
To: ham-ant@ucsd.edu

Anyone out there have any experience with the Alpha-Delta sloper antenna for SWL reception?? I have about 75 feet from my tower to an unused utility pole and have been thinking about stringing up a long wire. I saw an ad for the SWL sloper which might fit the bill. It apparently covers all of the popular SW bands and terminates to 50 ohm coax.

Thanks, in advance, for any responses.

Terry

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Terry Florek WB9QDM
AT&T Consumer Products Labs, Indianapolis, Indiana

Date: Thu, 02 Jun 1994 21:57:00 -0500
From: ihnp4.ucsd.edu!usc!cs.utexas.edu!swrinde!gatech!psuvax1!hsdndev!NewsWatcher!
user@network.ucsd.edu
Subject: stationmaster radomes wear out!
To: ham-ant@ucsd.edu

I recently asked for help to figure out why two Sincalir stationmaster repeater antennas (2M & 220) had both developed hi SWR and were leaking water down into the pigtail. Well, we recently removed the two antennas and they both showed the same incredible finding. The outer shiny white plastic coating of the radome was completely gone. The middle layer of fibreglass wrapping was exposed! Looks like 4 years of central Vermont wind at just under 2000' (both top mounted) had sufficient abrasive strength to strip off the outer protective coat and allow water in! I had never heard of this. Does this happen at all repeater sites? Is the Sinclair radome not as strong as other radomes (Celwave, etc)?

Frank

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Frank H. Duffy, MD	e-mail: duffyfr@a1.tch.harvard.edu
Neurology, Childrens Hospital	workstation: fhd@fhd486.harvard.edu
& Harvard Medical School	FAX: (617) 735-7230
300 Longwood Avenue	voice: (617) 735-7919 / 7846
Boston, MA 02115 USA	amateur radio: K1MOQ

Date: 2 Jun 1994 23:58:06 -0500
From: ihnp4.ucsd.edu!usc!cs.utexas.edu!not-for-mail@network.ucsd.edu
Subject: Taking apart and putting together antennas
To: ham-ant@ucsd.edu

I am wondering what the best way to cut antennas and then put them together. After cutting them (in the least important place I have three methods for putting them together (that I have used on masts and limited use on antennas) which do any of you think works best?

- 1) Insert wooden dowel rod (that is slightly smaller than inner diameter of tube) into tube, and
 lock into place (both horizontally and radially) with a set screw -

 after drilling holes
 in both pieces. To ensure a good electrical connection, fasten

 gap with a hose clamp.
- 2) Crimp one piece of metal, and stick it inside the other (well, RadioShack does it)
- 3) Obtain a pipe slightly larger than the diameter being cut. Use it as a sleeve (perhaps with set screws) to hold the two pipes together.
- 4) Combine 1 and 3. Maybe this is overkill?

I would hate to waste \$500 worth of aluminium.

73
Dave/KA1NCN
caseda@ecsuc.ctstateu.edu

Date: Thu, 2 Jun 1994 13:22:26 GMT
From: nntp.cadence.com!fonzie!pmohan@uunet.uu.net
Subject: Want to hear your experience with AEA IsoLoop.
To: ham-ant@ucsd.edu

Hello:

I am presently considering buying an AEA IsoLoop for HF. Does someone here have experience with this antenna? Please let me know about the effectiveness of this antenna for HF, if used in an apartment balcony on the third floor.

Thanks very much for your help.

//Mohan

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End of Ham-Ant Digest V94 #168

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